

**Montana Board of Oil and Gas Conservation
Environmental Assessment**

Operator: MRC LLC
Well Name/Number: State 15-11
Location: SW SE Section 11 T37N R4E
County: Liberty MT; Field (or Wildcat) Whitlash (East State Unit)

Air Quality

(possible concerns)

Long drilling time: No, 5 to 6 days drilling time.

Unusually deep drilling (high horsepower rig): No, 3100' TD.

Possible H2S gas production: No H2S anticipated.

In/near Class I air quality area: No Class I air quality area nearby.

Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: Gas plant nearby. no special concerns – using small rig to drill to 3100'TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater and freshwater mud system.

High water table: No high water table anticipated.

Surface drainage leads to live water No, closest drainage is an unnamed ephemeral tributary drainage to Dohrs Creek, to the south of this location.

Water well contamination: No, closest water wells are at about 1/2 of a mile to the east, about. Deepest well nearby is in Section 10 to the west and is 250' deep. If this well is successful, production casing will be cemented to surface. Surface casing will be set to 350' and cemented to surface.

Porous/permeable soils: No, bentonite clay sandy soils.

Class I stream drainage: None in the area of review.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☐ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: _____

Comments: 350' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used for all drilled hole. 4 1/2" production casing will be cemented to surface, if well is successful.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

High erosion potential: No, a small cut, up to 5.1' and fill, up to 6.0', required.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, a small location size is required.

Damage to improvements: Slight, surface use is grassland.

Conflict with existing land use/values Slight

Mitigation

☐ Avoid improvements (topographic tolerance)

☐ Exception location requested

☒ Stockpile topsoil

☐ Stream Crossing Permit (other agency review)

☒ Reclaim unused part of wellsite if productive

☐ Special construction methods to enhance reclamation

☐ Other _____

Comments: Access will be over existing county gravel roads, Flat Coulee road. Will construct a very short new access road into this location. Cuttings will be buried in the earthen reserve pit. Fluids will be allowed to evaporate. Pit will be backfilled when dry. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Wallace Ranch is about 1 mile to the west and the Schafer Ranch is about ¾ of a mile to the south from this location.

Possibility of H2S: No H2S anticipated.

Size of rig/length of drilling time: Small single derrick drilling rig. Short drilling time, estimated 5 to 6 days.

Mitigation:

☒ Proper BOP equipment

☐ Topographic sound barriers

☐ H2S contingency and/or evacuation plan

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: No concerns. Distance and topographical features should mitigate any noise issues.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None identified

Creation of new access to wildlife habitat: No, next to well used county road.

Conflict with game range/refuge management: No game range/refuge nearby.

Threatened or endangered Species: Species listed as threatened and endangered is the Black-Footed Ferret. Candidate species are the Greater Sage Grouse and the Sprague's Pipit. NH Tracker website lists the following species as "Species of Concern".

Sprague's Pipit, Chestnut Collared Larkspur, Long-billed Curlew and McCown's Longspur.

Mitigation:

- ☐ Avoidance (topographic tolerance/exception)
- ☐ Other agency review (DFWP, federal agencies, DSL)
- ☐ Screening/fencing of pits, drillsite
- ☐ Other: _____

Comments: Location is close to a well traveled county gravel road and in an active oil field, Whitlash Oil Field. No concerns.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified.

Mitigation

- ☐ avoidance (topographic tolerance, location exception)
- ☐ other agency review (SHPO, DSL, federal agencies)
- ☐ Other: _____

Comments: Private surface grasslands.

Social/Economic

(possible concerns)

- ☐ Substantial effect on tax base
- ☐ Create demand for new governmental services
- ☐ Population increase or relocation

Comments: Additional development well in the Whitlash Oil Field. No concerns.

Remarks or Special Concerns for this site

Well is a 3100' Rierdon formation test. Well is in an existing oil and gas field, Whitlash Oil Field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in a short time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/Thomas Richmond

(title:) Administrator

Date: Aug 29 2013

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Liberty County water wells

(subject discussed)

Aug 29 2013

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA
COUNTIES, Liberty County

(subject discussed)

July 8, 2011

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____